
Technical Review Comments
for the
Chemical Recycling, Inc. Facility
2006 Site Investigation Report



Prepared for
U.S. Environmental Protection Agency
Region 6

Prepared by

Dynamac Corporation
Superfund Technical Assessment and Response Team III (START)

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Document: 2006 Site Investigation Report – Chemical Recycling Inc.

General Comments:

1. No major comments were identified from the review.
2. Review of the 2006 Site Investigation Report, Chemical Recycling Inc. site, (Wylie, Collin County, Texas) indicates soil and groundwater contamination at levels exceeding U. S. Environmental Protection Agency Maximum Contamination Levels (MCLs) and/or Texas Commission on Environmental Quality Tier I Residential Class III Groundwater Protection Concentration Levels (PCLs).
3. In future reports, identification of analytical results in proper units should be added to all tables, charts, and figures. In several locations, units were not provided, and in some cases were not consistent with the actual results. For example, Figure 14 is marked showing units in mg/l. However, according to the attached analytical results, the concentrations should be marked as ug/l.

Soils:

1. Soils analytical results for metals from the Experimental Roads reveals metals contamination of mercury, lead, and zinc. Contamination is detected from surface interval down to 18" interval depths. Trichloroethene was also detected at several locations along the road down to 24" in depth. Any removal plan developed for the road should consider excavation to 24" with confirmation samples to confirm total removal below applicable site action levels.
2. According to Table 11, only six duplicate soil samples were collected and submitted for metal analysis; however, according to Section 3.3, a total of 166 soil samples were submitted to the laboratory for metal analyses. This calculates to a frequency of 3% for duplicate samples. EPA Quality Assurance protocol typically requires the collection of one duplicate sample per matrix per 10 samples (i.e., 10 %). The 2006 Investigation report does not state whether duplicate samples were to be collected and analyzed on a frequency of less than 10%. It does appear that the required number of MS/MSD samples for total metals exceeded the EPA QA frequency of one (1) sample per matrix per 20 samples (i.e., 20%).

Groundwater:

1. Groundwater samples from 14 monitoring wells were analyzed for Volatile Organic Compound (VOC) concentrations. Results show both increases and decreases in Total VOC (TVOC) concentrations among various wells, but overall stable plume delineation.

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Golder claims that concentrations have reduced by 74%; however, no calculations are provided to demonstrate how a reduction of 74% overall TVOC was determined. In addition, all wells were redeveloped during the 2006 site investigation, which could affect sample comparison between data sets twelve years apart.

2. Section 4.0, page 13, identifies that a Teflon bailer was used to collect the groundwater sample from MW-04 due to the poor well recovery at this monitoring well. Chemical analysis of the groundwater sample did not detect the presence of TVOCs. The non-detects of TVOCs in the groundwater sample could be the result of using the Teflon bailer, instead of using "low flow" sampling techniques with a submersible pump.
3. The investigation conducted in 2006 detected the presence of vinyl chloride in groundwater samples from MW-3, MW-9, MW-10, and MW-14. This constituent was not detected in the previous 1994 analytical sampling results. Vinyl chloride is a by-product of the biodegradation of chlorinated VOCs and its presence could be a result of biodegradation.